

IN THE CLAIMS:

Please AMEND claims 15 and 16, CANCEL claims 34 and 35, and ADD claim 36 and 37 in accordance with the following.

Claims 1-14 (canceled).

15. (currently amended) A method for operating a radio system with stations, including a first emitting station equipped with a first directional antenna, comprising providing for transmission of data from the first emitting station to a first receiving station using the first directional antenna in a first spatial radio area; and broadcasting first direction information revealing a first spatial direction in which the first emitting station provides for the transmission of data.

16. (currently amended) A method in accordance with claim 15, further comprising: receiving the first direction information at a second emitting station; and taking the first direction information into account for occupation of transmission resources by the second emitting station.

17. (previously presented) A method in accordance with claim 16, wherein the second emitting station is equipped with a second directional antenna and provides for transmission of data to a second receiving station using the second directional antenna in a second spatial radio area,

wherein said taking into account comprises checking, at the second emitting station based on the first direction information, whether the first and the second spatial radio area overlap at one of the receiving stations, and

wherein said method further comprises transmitting data from the first and second emitting stations, only taking place at least partly simultaneously if the first and the second spatial radio areas do not overlap at any receiving stations.

18. (previously presented) A method in accordance with claim 17, wherein the second emitting station broadcasts second direction information revealing a second spatial direction in which the second emitting station provides for transmission of data.

19. (previously presented) A method in accordance with claim 18, wherein the stations of the radio system broadcast position information about their geographical position.

20. (previously presented) A method in accordance with claim 19, further comprising broadcasting from the first emitting station time interval information about a first time interval provided for transmission of data to the first receiving station.
21. (previously presented) A method in accordance with claim 20, further comprising broadcasting from the second emitting station time interval information about a second time interval provided for transmission of data to the second receiving station, after said checking for overlapping of the first and second spatial radio areas.
22. (previously presented) A method in accordance with claim 21, wherein the first and second direction information specify the geographical position of the first and second emitting stations and the first and second spatial directions, respectively.
23. (previously presented) A method in accordance with claim 21, wherein the first and second direction information specify the geographical position of the first and second receiving stations, respectively.
24. (previously presented) A method in accordance with claim 21, wherein the first and second direction information includes antenna information about characteristics of the first and second directional antenna, respectively.
25. (previously presented) A method in accordance with claim 21, wherein the radio system is one of a cellular radio system and a wireless local area network.
26. (previously presented) A method in accordance with claim 25, wherein at least one of the first and second emitting stations and the first and second receiving stations is a mobile station.
27. (previously presented) A method in accordance with claim 18, further comprising broadcasting from the first emitting station time interval information about a first time interval provided for transmission of data to the first receiving station.

28. (previously presented) A method in accordance with claim 27, further comprising broadcasting from the second emitting station time interval information about a second time interval provided for transmission of data to the second receiving station, after said checking for overlapping of the first and second spatial radio areas.

29. (previously presented) A method in accordance with claim 18, wherein the first and second direction information specify the geographical position of the first and second emitting stations and the first and second spatial directions, respectively.

30. (previously presented) A method in accordance with claim 18, wherein the first and second direction information specify the geographical position of the first and second receiving stations, respectively.

31. (previously presented) A method in accordance with claim 18, wherein the radio system is one of a cellular radio system and a wireless local area network.

32. (previously presented) A method in accordance with claim 18, wherein at least one of the first and second emitting stations and the first and second receiving stations is a mobile station.

33. (previously presented) A method in accordance with claim 15, further comprising broadcasting from the first emitting station time interval information about a first time interval provided for transmission of data to the first receiving station.

Claims 34-35 (canceled).

36 (new) An emitting station for a radio system also having at least one receiving station, comprising:

at least one directional antenna for transmission of data;

at least one omnidirectional antenna for broadcasts;

means for transmission of data to one of the at least one receiving station in a spatial radio area using the at least one directional antenna; and

means for broadcasting direction information revealing a spatial direction in which the emitting station provides for the transmission of data.

37. (new) A radio system, comprising:
at least one receiving station; and
at least one emitting station, including
at least one directional antenna for transmission of data;
at least one omnidirectional antenna for broadcasts;
means for transmission of data to one of the at least one receiving station in a spatial radio area using the at least one directional antenna; and
means for broadcasting direction information revealing a spatial direction in which the emitting station provides for the transmission of data.